

Patient	$\Delta$ IOP Superior		$\Delta$ IOP Inferonasal		$d\Delta$ IOP		P-value
	mean	SEM	mean	SEM	mean	SEM	
1	8.3	0.91	-0.5	0.34	8.9	0.59	<b>0.004</b>
2	2.2	0.87	-1.4	0.11	3.7	0.86	0.051
3	2.5	0.31	-2.4	0.10	4.9	0.26	<b>0.003</b>
4	3.5	0.29	-2.5	0.88	6.0	0.64	<b>0.011</b>
5	0.5	0.71	-0.7	0.31	1.2	1.02	0.441
6	11.3	1.06	-1.0	0.29	12.2	1.35	<b>0.012</b>
7	8.0	0.33	-1.5	0.39	9.5	0.63	<b>0.004</b>
8	-1.6	0.52	-1.1	0.42	-0.5	0.69	0.512
9	13.1	1.17	-2.5	0.15	15.6	1.08	<b>0.005</b>
10	0.9	0.15	-2.4	0.61	3.3	0.71	<b>0.044</b>
11	0.0	0.33	-1.9	0.38	1.9	0.44	<b>0.048</b>

### Supplemental Table 1

Individual IOP changes during superior and inferonasal gaze direction at 25 degrees.

Normal distributed continuous data presented as mean  $\pm$  SEM. Acquired IOP data during gaze experiments presented for each individual separately (N=11, mean over 3 repetitions [patient 5 performed two repetitions]).  $\Delta$ IOP values shown (from left to right) for superior gaze direction, inferonasal gaze direction, and the difference between the two directions ( $d\Delta$ IOP). Shown *P*-values (right column) were obtained using a paired T-test within each individual (significant differences are highlighted in bold).

Marked IOP increase in upward gazes occurred in especially patients 1, 6, 7 and 9. Overall, most patients show similar trends of IOP increase or decrease in similar directions and eccentricities.